Observations of Occultations of Stars by the Moon and of Phenomena of Jupiter's Satellites made at the Royal Observatory, Greenwich, in the year 1897.

(*Communicated by the Astronomer Royal.*)

Day	Phenomenon.	Telescope.	Power.	Moon's Limb.	Mean Solar Time of Observation. h m s	Observer.
Apr. 15	Disapp. W.B. XII. 334	Astrographic Equat.	225	Dark	11 32 38·24	J.
May 4	Reapp. Piazzi IV. 287	Altazimuth	100	Bright	8 38 0·98	H.
4	Disapp. W.B. (2) IV. 1358–9	,,	100	Dark	8 39 49·58	,,
6	,, W.B. (2) VI. 1452	,,	100	,,	9 36 31·67	A. C.
6	,, W.B. (2) VI. 1447	Sheepshanks Equat.	100	,,	9 38 30 78	J.
June 18	,, Piazzi XXI. 291	,,	100	Bright	13 42 37·24	S.
18	Reapp. ,,	,,	100	Dark	14 10 47·50	,,
July 11 (*a*)	,, Lalande 31226	Astrographic Equat.	225	Bright	9 6 41·95	W.
13	Disapp. χ^1 Sagittarii	Sheepshanks Equat.	55	Dark	9 21 4·17	B.
13	,, ,,	Altazimuth	100	,,	9 21 4·27	S.
13	,, ,,	Astrographic Equat.	225	,,	9 21 3·87	W. S.
13 (*b*)	Reapp. ,,	Sheepshanks Equat.	225	Bright	10 22 (10·20)	B.
13	,, ,,	Altazimuth	100	,,	10 22 7·82	S.
23	Disapp. 17 Tauri	Astrographic Equat.	225		12 17 2·78	C. D.
23	,, ,,	Sheepshanks Equat.	100	,,	12 17 (0·09)	W. S.
23	,, 16 Tauri	Astrographic Equat.	120	,,	12 40 35·43	C. D.
23	Reapp. ,,	,,	120	Dark	12 53 29·52	,,

Day.	Phenomenon.	Telescope.	Power.	Moon's Limb.	Mean Solar Time of Observation. h m s	Observer.
July 23	Reapp. 16 Tauri	Sheepshanks Equat.	100	Dark	12 53 29·89	W. S.
23	Disapp. 23 Tauri	Astrographic Equat.	120	Bright	12 55 15·53	C. D.
23	,, ,,	Sheepshanks Equat.	100	,,	12 55 14·80	W. S.
23 (*a*)	,, Piazzi III. 135	Astrographic Equat.	225	,,	12 58 53·44	C. D.
23 (*a*)	,, B.D. + 23° No. 523	,,	225	,,	13 1 9·07	,,
23	Reapp. 17 Tauri	,,	120	Dark	13 10 4·51	,,
23	,, ,,	Corbett Tel.	100	,,	13 10 3·72	H. F.
23	,, ,,	28-inch Equat.	670	,,	13 10 3·52	S.
23	,, W.B. (2) III. 812	Astrographic Equat.	120	,,	13 10 57·47	C. D.
23	,, Piazzi III. 135	,,	120	,,	13 19 24·29	,,
23	,, ,,	Sheepshanks Equat.	100	,,	13 19 (25·83)	W. S.
23	,, B.D. + 23° No. 510	Astrographic Equat.	120	,,	13 22 13·63	C. D.
23	Disapp. η Tauri	,,	120	Bright	13 22 45·74	,,
23	,, ,,	Corbett Tel.	100	,,	13 22 46·41	H. F.
23	,, ,,	28-inch Equat.	670	,,	13 22 46·41	S.
23	,, ,,	Sheepshanks Equat.	100	,,	13 22 46·28	W. S.
23	,, Piazzi III. 151	Corbett Tel.	100	,,	13 26 46·13	H. F.
23	,, ,,	28-inch Equat.	670	,,	13 26 46·73	S.
23	Reapp. B.D. + 23° No. 513	Astrographic Equat.	225	Dark	13 28 36·58	C. D.
23	,, B.D. + 23° No. 517	,,	120	,,	13 32 30·95	,,

Day.	Phenomenon.	Telescope.	Power.	Moon's Limb.	Mean Solar Time of Observation. h m s	Observer.
July 23	Reapp. 23 Tauri	Corbett Tel.	100	Dark	13 32 29·37	H. F.
23	,, ,,	28-inch Equat.	670	,,	13 32 29·17	S.
23	,, W.B. (2) III. 845	Corbett Tel.	100	,,	13 47 51·60	H. F.
23	,, ,,	28-inch Equat.	670	,,	13 47 51·20	S.
23	,, W.B. (2) III. 846	Astrographic Equat.	120	,,	13 48 51·36	C. D.
23	,, ,,	Corbett Tel.	100	,,	13 48 51·32	H. F.
23	,, ,,	28-inch Equat.	670	,,	13 48 50·82	S.
23	,, ,,	Sheepshanks Equat.	100	,,	13 48 (52·47)	W. S.
23	,, B.D. + 23° No. 528	Astrographic Equat.	120	,,	13 52 34·76	C. D.
23	,, ,,	Corbett Tel.	100	,,	13 52 35·21	H. F.
23	,, ,,	Sheepshanks Equat.	100	,,	13 52 34·36	W. S.
23	,, B.D. + 23° No. 523	Astrographic Equat.	120	,,	13 54 15·68	C. D.
23	,, ,,	Corbett Tel.	100	,,	13 54 15·62	H. F.
23	,, ,,	28-inch Equat.	670	,,	13 54 14·62	S.
23	,, B.D. + 23° No. 526	Astrographic Equat.	120	,,	13 55 40·15	C. D.
23	,, B.D + 23° No. 531	,,	120	,,	14 12 17·44	,,
23	,, ,,	Corbett Tel.	100	,,	14 12 16·61	H. F.
23	,, ,,	Sheepshanks Equat.	100	,,	14 12 17·11	W. S.
23	,, 24 Tauri	Astrographic Equat.	120	,,	14 13 4·31	C. D.
23	,, ,,	Corbett Tel.	100	,,	14 13 3·57	H. F.

Day.	Phenomenon.	Telescope.	Power.	Moon's Limb.	Mean Solar Time of Observation. h m s	Observer.
July 23	Reapp. 24 Tauri	28-inch Equat.	670	Dark	14 13 4·87	S.
23	,, ,,	Sheepshanks Equat.	100	,,	14 13 3·98	W. S.
23	,, B.D. + 23° No. 534	Astrographic Equat.	120	,,	14 14 14·03	C. D.
23 (*c*)	,, ,,	Corbett Tel.	100	,,	14 14 (16·59)	H. F.
23	,, η Tauri	Astrographic Equat.	120	,,	14 15 3·98	C. D.
23	,, ,,	Corbett Tel.	100	,,	14 15 3·04	H. F.
23	,, ,,	28-inch Equat.	670	,,	14 15 2·44	S.
23	,, ,,	Sheepshanks Equat.	100	,,	14 15 3·65	W. S.
23	Disapp. 28 Tauri	Astrographic Equat.	120	Bright	14 17 22·40	C. D.
23 (*a*)	,, ,,	Corbett Tel.	100	,,	14 17 (19·45)	H. F.
23	,, ,,	28-inch Equat.	670	,,	14 17 21·55	S.
23	Reapp. Piazzi III. 151	Astrographic Equat.	120	Dark	14 24 50·29	C. D.
23	,, ,,	Corbett Tel.	100	,,	14 24 49·81	H. F.
23	,, ,,	28-inch Equat.	670	,,	14 24 49·81	S.
23	,, ,,	Sheepshanks Equat.	100	,,	14 24 49·75	W. S.
23	,, B.D. + 23° No. 548	Astrographic Equat.	120	,,	14 32 59·85	C. D.
23 (*a*)	Disapp. Piazzi III. 164	Corbett Tel.	100	Bright	14 33 17·59	H. F.
23	,, ,,	28-inch Equat.	670	,,	14 33 18·29	S.
23	Reapp. B.D. + 23° No. 549	Astrographic Equat.	120	Dark	14 46 44·31	C. D.
23	,, ,,	Corbett Tel.	100	,,	14 46 45·85	H. F.
23	,, ,,	28-inch Equat.	670	,,	14 46 45·35	S.
23	,, B.D. + 23 No. 554	Astrographic Equat.	120	,,	14 47 31·78	C. D.
	,, ,,	Corbett Tel.	100	,,	14 47 31·81	H. F.

Day.	Phenomenon.	Telescope.	Power.	Moon's Limb.	Mean Solar Time of Observation. h m s	Observer.
July 23	Reapp. B.D. + 23 No. 554	28-inch Equat.	670	Dark	14 47 31·71	S.
23	,, 28 Tauri	Astrographic Equat.	120	,,	14 52 45 13	C. D.
23	,, ,,	Corbett Tel.	100	,,	14 52 44·84	H. F.
23	,, ,,	28-inch Equat.	670	,,	14 52 44·84	S.
23	,, Bradley 523	Corbett Tel.	100	,,	14 55 35·36	H. F.
23	,, ,,	28-inch Equat.	670	,,	14 55 33·86	S.
23	,, B.D. + 23° No. 562	Astrographic Equat.	120	,,	15 14 26·19	C. D.
23	,, ,,	Corbett Tel.	100	,,	15 14 25·52	H. F.
23	,, ,,	28-inch Equat.	670	,,	15 14 24·32	S.
23	,, ,,	Sheepshanks Equat.	100	,,	15 14 24·90	W. S.
23	,, B.D. + 23° No. 560	Astrographic Equat.	120	,,	15 19 52·20	C. D.
23	,, ,,	Corbett Tel.	100	,,	15 19 51·20	H. F.
23	,, ,,	28-inch Equat.	670	,,	15 19 50·80	S.
23	,, W.B. (2) III. 903	Astrographic Equat.	120	,,	15 21 53·57	C. D.
23	,, ,,	Corbett Tel.	100	,,	15 21 52·47	H. F.
23	,, ,,	28-inch Equat.	670	,,	15 21 52·17	S.
23	,, ,,	Sheepshanks Equat.	100	,,	15 21 53·46	W. S.
23 (*d*)	,, Piazzi III. 164	Corbett Tel.	100	,,	15 36 36·80	H. F.
23	,, ,,	28-inch Equat.	670	,,	15 36 36·00	S.
Aug. 4	Disapp. 89 Virginis	Altazimuth	100	,,	8 17 0·81	H.
Oct. 3	,, χ^2 Sagittarii	Sheepshanks Equat.	125	,,	6 41 59·42	W.
3	,, χ^1 Sagittarii	Astrographic Equat.	225	,,	6 42 59·57	R. C.

Day.	Phenomenon.	Telescope.	Power.	Moon's Limb.	Mean Solar Time of Observation. h m s	Observer.
Oct. 3	Disapp. χ^1 Sagittarii	Sheepshanks Equat.	125	Dark	6 42 59·35	W.
3	Reapp. ,,	,,	125	Bright	7 33 59·57	,,

Notes.

(*a*) Not considered a good observation.
(*b*) Seemed to be a slight distance from limb when first seen.
(*c*) The observer noted that the observed time was probably late.
(*d*) Observed in twilight. The observed time has been diminished by one minute.

Phenomena of Jupiter's Satellites.

Day.	Satellite.	Phenomenon.	Telescope.	Power.	Mean Solar Time of Observation. h m s	Mean Solar Time of *N.A.* h m	Observer.
1897.							
Jan. 27	I. (*a*)	Tr. Ing. First contact	E. Equat.	120	9 6 56·41		H.
27	I.	Bisection	,,	,,	9 9 1·07	9 10	,,
27	I.	Last contact	,,	,,	9 11 15·7		,,
27	I.	Tr. Egr. Bisection	,,	,,	11 28 13·34	11 29	,,
27	I.	Last contact	,,	,,	11 30 8·03		
28	II.	Tr. Ing. Bisection	,,	,,	9 53 48·53	9 55	A. C.
28	II.	Last contact	,,	,,	9 55 33·24		
28	II.	Tr. Egr. First contact	,,	,,	12 38 37·58		,,
28	II.	Bisection	,,	,,	12 40 43·24	12 45	,,
28	II.	Last contact	,,	,,	12 42 23·96		,,
Mar. 13	I. (*b*)	Occ. D. First contact	,,	,,	11 7 45·23		W. B.
13	I.	Bisection	,,	,,	11 9 10·00	11 9	,,
13	I.	Last seen	,,	,,	11 10 24·80		,,